



CITY OF PORTLAND ENVIRONMENTAL SERVICES



1120 SW Fifth Avenue, Room 1000, Portland, Oregon 97204 ■ Nick Fish, Commissioner ■ Michael Jordan, Director

November 5, 2015

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Oregon Department of Environmental Quality
Northwest Region Cleanup Program
700 NE Multnomah St., Suite #600
Portland, OR 97232

Subject: Review of draft *Stormwater Source Control Evaluation Work Plan* (dated October 2015) for
3950 NW Yeon Avenue, Portland, Oregon

Dear Alex:

This letter provides comments from the City of Portland Bureau of Environmental Services to the Oregon Department of Environmental Quality (DEQ) based on our review of the above referenced document (SWSCE WP) submitted by ERM on behalf of Univar USA, Inc. (Univar). Stormwater from Univar discharges to the Willamette River via the City stormwater system affiliated with Outfall 18. The City previously commented on the site's August 2012 *Draft Stormwater Pathway Investigation Report*.¹ The SWSCE WP addresses many of the issues identified in the City's previous comment letter – in particular, by proposing to collect data from the onsite conveyance system instead of relying only on samples collected from the shared municipal system conveying site discharges. However, two of the previously identified data gaps – analysis of site samples for pesticides and comprehensive evaluation of the site groundwater infiltration pathway – are not addressed by the work proposed in the SWSCE WP. Our specific comments regarding these data gaps, along with additional comments on the SWSCE WP, are provided below.

Previously Identified Data Gaps

Lack of Site Pesticides Data

1. As noted in the City's previous comment letter, the lack of site-specific pesticides data is considered a data gap for confirming that Univar is not a significant source of pesticides to the Basin 18 stormwater conveyance system. Data from the east-central subbasin of Basin 18 indicate the presence of pesticides in stormwater solids, stormwater, and dry-weather flow samples collected downstream of Univar site connections,^{2,3} and pesticides are elevated in river sediment in the vicinity of Outfall 18 (i.e., Area of Potential Concern 19). In addition, pesticides were handled on site and were detected in site soils.⁴ Therefore pesticides should be included as contaminants of interest (COI) and analyzed for all media sampled under Univar's SWSCE WP.

¹ Letter dated February 27, 2013, to H. Arrigoni (EPA) from L. Scheffler (BES).

² *Outfall Basin 18 East-Central Subbasin Source Investigation Report*. BES. May 2012.

³ *Draft Stormwater Pathway Investigation Report*, prepared by PES Environmental, Inc. August 21, 2012.

⁴ Table 9 of *Revised Stormwater Pathway Investigation Work Plan*, prepared by PES Environmental, Inc. June 19, 2009.

Groundwater Infiltration Pathway Evaluation

2. From the information presented in the SWSCE WP, it appears that the proposed investigation of the groundwater infiltration pathway will not be adequate to determine if source controls are needed. Site groundwater enters the Basin 18 conveyance system through infiltration into and flow around site laterals, and via direct infiltration into the City stormwater main adjacent to the site and the ODOT storm line downgradient of the site.^{5 6} Groundwater contamination is present across the entire site and across utility corridors on NW Yeon Ave.⁷ As noted in our previous comment letter, several types of information need to be factored into this evaluation, including available groundwater levels, chemical data from site monitoring wells, groundwater flow directions, and identification of onsite and offsite conveyances that may be impacted. The SWSCE WP states that reporting will include a weight-of-evidence evaluation of this pathway but does not specify what types of information will be included other than data from one proposed onsite sample location and dry-weather flow results previously collected from one component of the City system during the Stormwater Pathway Investigation. The SWSCE WP should provide a more detailed description of the work and lines of evidence proposed for the evaluation of this pathway and should include the following:
 - a. Figure showing the spatial extent of the site groundwater plume and indicating where groundwater contaminant concentrations are highest.
 - b. Information to identify the most likely areas for groundwater infiltration (i.e., where groundwater elevations are likely to intersect site and/or City stormwater lines) to support the proposed sampling plan. Sample locations need to reflect all likely pathways.
 - c. Sample timing (e.g., during seasonal high groundwater levels) and sample number sufficient to provide technically sound characterization.
 - d. Broad range of COIs for proposed analysis. (See comment 5 below.)
3. Section 2.3.5 indicates that dry-weather flow sampling results from the Stormwater Pathway Investigation will be used as a line of evidence for evaluating the potential for groundwater infiltration to the City stormwater system. As noted in the City's previous comment letter, the polychlorinated biphenyl (PCB) congener analysis of these samples only included 35 out of 209 congeners. This limited analysis likely significantly underestimates total PCB concentrations. Therefore, these previously collected data are not useful for evaluating the presence or magnitude of PCBs in contaminated groundwater infiltrating into the City's stormwater conveyance system.
4. Section 4.3 indicates that the only proposed dry-weather flow sampling location is the incoming site lateral at manhole (MH) AAT564 on the City's storm line, and states that this single location is considered representative of site groundwater infiltrating the City stormwater system. The City strongly disagrees with this statement. Figure 10 in the 2012 *Draft Stormwater Pathway Investigation Report* indicates that the site groundwater plume intersects a long section of the City line that runs along the eastern property boundary. Previous research on behalf of the City⁷ indicates that the site plume extends across the entire site and across the downgradient ODOT storm line on NW Yeon Avenue. Therefore, the single lateral proposed for sampling is

⁵ See Figure 10 in 2012 *Draft Stormwater Pathway Investigation Report*.

⁶ A third pathway for site groundwater to the City's conveyance system is through batched and piped discharge from Univar's groundwater treatment system under a current NPDES permit.

⁷ *Relationships Between Upland Shallow Groundwater Plumes and the City Stormwater and Combined Conveyance System Within the Portland Harbor*. Groundwater Solutions Inc. March 16, 2006 (revised September 12, 2011).

not necessarily representative of infiltration via other site lines or via direct infiltration to offsite conveyance systems. The SWSCE WP should include dry-weather flow sampling locations on the adjacent City line on the eastern boundary at MHs upstream and downstream of the site connections, as was done for the Stormwater Pathway Investigation, as well as a methodology to evaluate the infiltration pathway to the downgradient ODOT line. Note that an access permit from the City will be required to collect samples from MH AAT564 and any other sample locations that access City lines.

Additional Comments

Contaminants of Interest and Chemical Analysis

5. Section 3.4 states that, "Only those chemicals identified [in the 2012 *Draft Stormwater Pathway Investigation Report*] as potential COIs as part of Univar's RCRA cleanup activities, historical stormwater discharge monitoring, line inspection, and pathway investigation activities have been retained as COCs for the purpose of evaluating the stormwater pathway." The SWSCE is a Joint Source Control Strategy (JSCS) screening evaluation. Therefore, COIs selected for the screening of all pathways should include not only site-specific COIs but also those that are present above screening level values (SLVs) in the receiving conveyance system (i.e., Basin 18 system downgradient of the site) and in-river sediment at the outfall. COIs should not be limited to those retained for other objectives and under other authorities. In particular, as noted above, pesticides should be included in the screening of both the stormwater and groundwater infiltration pathways.
6. Section 5.4 states that a data report will present results of the catch basin solids sampling and will include "recommendations for modifications to stormwater characterization analytes (if necessary)" based on results of the solids sampling. The JSCS screening approach relies on solids and stormwater data, so the full suite of analytes included for the solids is needed for the stormwater samples as well. Table 4 also warrants modification to remove the indication that stormwater samples may be analyzed for a subset of the tests run on catch basin solids.
7. Table 4 excludes VOCs and SVOCs in stormwater from the two dock roof drains, but no rationale or justification for this omission is provided in this table, in Section 6.2, or elsewhere.
8. Tables 5 and 6 indicate that the proposed laboratory method detection limits (MDLs) and/or reporting limits (MRLs) in many cases exceed the corresponding SLVs. For catch basin solids this includes total PCBs. For stormwater this includes a few metals, all the PCB Aroclors, all phthalates, and PAHs. MDLs/MRLs for the PCBs and PAHs are particularly elevated. PAHs and phthalates should be analyzed by method 8270-SIM instead of 8270C as proposed, to achieve MDLs/MRLs lower than the corresponding SLVs. Significantly lower detection limits are also achievable for PCB Aroclors.

Other

9. Section 2.2. This section describes current operations and materials handled, but does not include a discussion of historical operations. Historical operations can be a source of legacy contamination and should be included as background information to provide support for the sampling program proposed in the SWSCE WP and subsequent source evaluation.
10. Section 2.3.3 notes that DEQ and the City requested Univar to inspect the 42-inch City stormwater line in 1996 and 2010 but does not mention the context. Specifically, as a result of contaminated material releases to the City stormwater conveyance system, Van Waters &

Rogers (Univar predecessor) was required to take corrective action related to onsite and offsite storm lines. Some of the relevant documents were attached to the City's July 25, 2008, comment letter on Univar's *Draft Stormwater Pathway Investigation Work Plan*.⁸

11. Section 2.3.5. The last sentence of this section states that dry-weather flow samples were only collected in the City's 42-inch line; however Section 5.3.3 of the 2012 *Stormwater Pathway Investigation* report indicates that dry-weather flow was also collected from water seeping from the site lateral entering at MH AAT564.
12. Section 2.4 states that the site is in the east-central subbasin of Basin 18. This section should also note that Drainage Basin (DB) 5 discharges to the west-central subbasin.
13. Apparent inconsistencies between the descriptions of the site drainage areas in Section 2.4.1 and the drainage systems depicted on Figure 3 and 4 should be resolved. For example, the text states that DB 1 discharges via a single lateral; however, the figures show two laterals, and it is unclear what the second lateral drains. The description of DB 2 does not adequately describe all the connections shown on the figures, and the nature of a "City special connection" (see figure legend) is not clear. DB 4 appears to include six connections, but it is not clear which of these actually convey site drainage. The text states that DB 5 has two catch basins, but the figures show four.
14. Section 4.1. One catch basin from each drainage area is proposed for solids sampling. In most cases, there are multiple catch basins within each drainage area. Collecting a composite sample from multiple catch basins in each drainage area would provide a broader representation of operations in each drainage area and would help to ensure that sufficient sample volume is available for all intended analyses.
15. In DB 2, it is unclear why Section 4.2 doesn't identify a sampling location for the loading dock area at the north end (e.g., E-2 and E-3). Also, for DB 5, moving the sampling location to SPCC valve W-3 would be more representative of the drainage area.
16. The catch basin solids sampling methodology described in Section 5.1 should clarify whether solids will be collected above or below the catch basin filter, if filters are present.
17. The SWSCE WP indicates that the stormwater and dry-weather flow results will be presented in the SWSCE report. This report should provide a comprehensive data evaluation, and therefore should also include the catch basin solids results.
18. Section 8.1 indicates the dry-weather flow sampling is proposed for the first phase of work. As noted above, the dry-weather flow sampling should be conducted during seasonal high groundwater levels.

According to the schedule provided at the end of the SWSCE WP, catch basin solids results will be available soon. The City anticipates the opportunity to review the proposed catch basin solids data report when it becomes available, and appreciates the ongoing collaboration with DEQ on identifying and controlling contaminant sources in Portland Harbor. If you have any questions, please contact me at 503-823-2296.

⁸ Subject: Review of *Draft Stormwater Pathway Investigation Work Plan* for the Univar USA Inc. Facility (formerly Van Waters & Rogers), Portland, Oregon. Letter to H. Orlean (EPA) from L. Scheffler (BES). July 25, 2008.

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Sincerely,



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Portland Harbor Program

c: Eva DeMaria / EPA
Kim Cox / City of Portland